

ABSTRACT

A method for detecting an inhibitory effect of a test gene on intracellular signal transduction is provided, which comprises transforming host cells by a vector carrying a gene capable of inducing cell death under specific conditions and having been ligated downstream to a promoter functioning in response to specific extracellular stimulation, introducing a test substance into the host cells or treating the host cells with the test substance so as to extracellularly stimulate the same, and then examining whether the cells survive or not to thereby detect whether the test substance has an inhibitory effect on intracellular signal transduction or not. Another detection method uses a reporter gene in place of the gene capable of inducing cell death. Furthermore, a method for isolating a gene having an inhibitory effect on intracellular signal transduction is provided, which comprises introducing a gene library into the host cells, screening surviving cells, and then isolating the introduced gene from the cells.